

INFORMATION DISCLOSURE STATEMENT

BY APPLICANT

Docket: 50848

Ser: 09/186,962

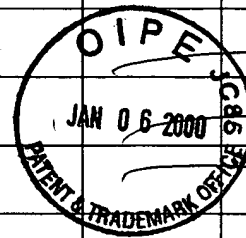
Applicant: Geoffrey B. Rhoads

Filed: 11/5/98

Group: 2721

U.S. PATENT DOCUMENTS

Init.*	Number	Date	Name	Class	Sub	Filed
CB	3,493,674	2/3/70	Houghton			
	3,569,619	3/9/71	Simjian			
	3,585,290	6/15/71	Sanford			
	3,655,162	5/23/72	Yamamoto et al.			
	3,703,628	11/21/72	Philipson, Jr.			
	3,805,238	4/16/74	Rothfjell			
	3,809,806	5/7/74	Walker et al.			
	3,838,444	9/24/74	Loughlin et al.			
	3,914,877	10/28/75	Hines			
	3,922,074	11/25/75	Ikegami et al.			
	3,971,917	7/27/76	Maddox et al.			
	3,982,064	9/21/76	Barnaby			
	3,984,624	10/5/76	Waggener			
	4,025,851	5/24/77	Haselwood et al.			
	4,225,967	9/30/80	Miwa et al.			
	4,230,990	10/28/80	Lert, Jr. et al.			
	4,231,113	10/28/80	Blasbalg			
	4,238,849	10/9/80	Gassmann			
CB	4,252,995	2/24/81	Schmidt et al.			



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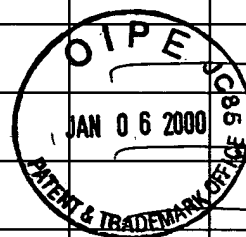
Applicant: Geoffrey B. Rhoads

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U.S. PATENT DOCUMENTS

Init.*	Number	Date	Name	Class	Sub	Filed
P16	4,262,329	4/14/81	Bright et al.			
	4,313,197	1/26/82	Maxemchuk			
	4,367,488	1/4/83	Leventer et al.			
	4,379,947	4/12/83	Warner			
	4,380,027	4/12/83	Leventer et al.			
	4,389,671	6/21/83	Posner et al.			
	4,395,600	7/26/83	Lundy et al.			
	4,423,415	12/27/83	Goldman			
	4,425,642	1/10/84	Moses et al.			
	4,476,468	10/9/84	Goldman			
	4,528,588	7/9/85	Löfberg			
	4,532,508	7/30/85	Ruell			
	4,547,804	10/15/85	Greenberg			
	4,553,261	11/10/85	Froessl			
	4,590,366	5/20/86	Rothfjell			
P20	4,595,950	6/17/86	Löfberg			
	4,637,051	1/13/87	Clark			
	4,639,779	1/27/87	Greenberg			
	4,647,974	3/3/87	Butler et al.			
EXAMINER: <i>John Z. Guro</i>			DATE: 1.19.00			



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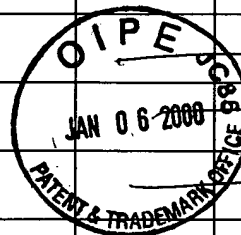
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U.S. PATENT DOCUMENTS

Init.*		Number	Date	Name	Class	Sub	Filed
<i>PLB</i>		4,654,867	3/31/87	Labeledz et al.			
		4,600,221	4/21/87	Dlugos			
		4,663,518	5/5/87	Borrer et al.			
		4,665,431	5/12/87	Cooper			
		4,672,605	6/9/87	Hustig et al.			
		4,675,746	6/23/87	Tetrick et al.			
		4,677,435	6/30/87	Cause D'Aggraives et al.			
		4,682,794	7/28/87	Margolin			
		4,703,476	10/27/87	Howard			
		4,712,103	12/8/87	Gotanda			
		4,718,106	1/5/88	Weinblatt			
		4,739,377	4/19/88	Allen			
		4,750,173	6/7/88	Blüthgen			
		4,765,656	8/23/88	Becker et al.			
		4,775,901	10/4/88	Nakano			
		4,776,013	10/4/88	Kafri et al.			
		4,805,020	2/14/89	Greenberg			
<i>V</i>		4,807,031	2/21/89	Broughton et al.			
<i>PLB</i>		4,811,357	3/7/89	Betts et al.			
EXAMINER:	<i>Forrest Brown</i>			DATE:	<i>1.19.00</i>		



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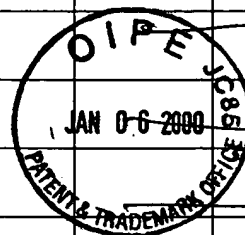
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U.S. PATENT DOCUMENTS

Init.*		Number	Date	Name	Class	Sub	Filed
<i>ELB</i>		4,811,408	3/7/89	Goldman			
		4,820,912	4/11/89	Samyn			
		4,835,517	5/20/89	van der Gracht et al.			
		4,855,827	8/8/89	Best			
		4,864,618	9/5/89	Wright et al.			
		4,866,771	9/12/89	Bain			
		4,874,936	10/17/89	Chandler et al.			
		4,876,617	10/24/89	Best et al.			
		4,879,747	11/7/89	Leighton et al.			
		4,884,139	11/28/89	Pommier			
		4,885,632	12/5/89	Mabey et al.			
		4,903,301	2/20/90	Kondo et al.			
		4,908,836	3/13/90	Rushforth et al.			
		4,908,873	3/13/90	Philibert et al.			
		4,920,503	4/24/90	Cook			
		4,921,278	5/1/90	Shiang et al.			
		4,939,615	7/3/90	Adelson			
		4,941,150	7/10/90	Iwasaki			
		4,943,973	7/24/90	Werner			
EXAMINER:	<i>Spencer</i>			DATE:	<i>1-19-00</i>		

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U.S. PATENT DOCUMENTS

Init.*		Number	Date	Name	Class	Sub	Filed
<i>MB</i>		4,943,976	7/24/90	Ishigaki			
		4,944,036	7/24/90	Hyatt			
		4,963,998	10/16/90	Maufe			
		4,965,827	10/23/90	McDonald			
		4,967,273	10/30/90	Greenberg			
		4,969,041	11/6/90	O'Grady et al.			
		4,972,471	11/20/90	Gross et al.			
		4,972,476	11/20/90	Nathans			
		4,977,594	12/90	Shear			
		4,979,210	12/18/90	Nagata et al.			
		4,993,068	2/12/91	Piosenka			
		4,996,530	2/26/91	Hilton			
		5,010,405	4/23/91	Schreiber et al.			
		5,027,401	6/25/91	Soltesz			
		5,036,513	7/30/91	Greenblatt			
		5,063,446	11/5/91	Gibson			
		5,073,899	12/17/91	Collier et al.			
		5,075,773	12/24/91	Pullen			
		5,077,608	12/31/91	Dubner			

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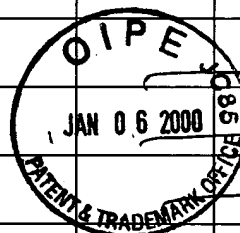
Applicant: Geoffrey B. Rhoads

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U.S. PATENT DOCUMENTS

Init.*		Number	Date	Name	Class	Sub	Filed
<i>AB</i>		5,077,795	12/31/91	Rourke et al.			
		5,079,648	1/7/92	Maufe			
		5,086,469	2/4/92	Gupta et al.			
		5,091,966	2/25/92	Bloomberg et al.			
		5,095,196	3/10/92	Miyata			
		5,113,437	5/12/92	Best			
		5,128,525	7/7/92	Stearns et al.			
		5,144,660	9/1/92	Rose			
		5,148,498	9/15/92	Resnikoff et al.			
		5,150,409	9/22/92	Elsner			
		5,161,210	11/3/92	Druyvesteyn et al.			
		5,166,676	11/24/92	Milheiser			
		5,168,146	12/1/92	Bloomberg			
		5,181,786	1/26/93	Hujink			
		5,185,736	2/9/93	Tyrrell et al.			
		5,199,081	3/30/93	Saito et al.			
		5,200,822	4/6/93	Bronfin et al.			
		5,212,551	9/18/93	Conanan			
		5,213,337	5/25/93	Sherman			



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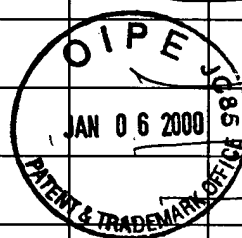
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U.S. PATENT DOCUMENTS

Init.*	Number	Date	Name	Class	Sub	Filed
<i>RD</i>	5,228,056	7/13/93	Schilling			
	5,243,423	9/7/93	DeJean et al.			
	5,245,165	9/14/93	Zhang			
	5,245,329	9/14/93	Gockebay			
	5,247,364	9/21/93	Banker et al.			
	5,253,078	10/12/93	Balkanski et al.			
	5,257,199	10/26/93	Funada et al.			
	5,258,998	11/2/93	Koide			
	5,259,025	11/2/93	Monroe			
	5,267,334	11/30/93	Normille et al.			
	5,280,537	1/18/94	Sugiyama et al.			
	5,293,399	3/8/94	Hefti			
	5,295,203	3/15/94	Krause et al.			
	5,299,019	3/29/94	Pack et al.			
	5,305,400	4/19/94	Butera			
	5,315,098	5/24/94	Tow			
	5,319,453	6/7/94	Copriviza			
	5,319,724	6/7/94	Blonstein et al.			
<i>RD</i>	5,319,735	6/7/94	Preuss et al.			



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Init.*		Number	Date	Name	Class	Sub	Filed
CLB		5,325,167	6/28/94	Melen			
		5,327,237	7/5/94	Gerdes et al.			
		5,337,362	8/9/94	Gormish et al.			
		5,349,655	9/20/94	Mann			
		5,351,302	9/27/94	Leighton et al.			
		5,379,345	1/3/95	Greenberg			
		5,387,941	2/7/95	Montgomery et al.			
		5,394,274	2/28/95	Kahn			
		5,396,559	3/7/95	McGrew			
		5,398,283	3/14/95	Virga			
		5,404,160	4/4/95	Schober et al.			
		5,404,377	4/4/95	Moses			
		5,408,542	4/18/95	Callahan			
		5,418,853	5/23/95	Kanota et al.			
		5,422,963	6/6/95	Chen et al.			
		5,422,995	6/6/95	Aoki et al.			
		5,425,100	6/13/95	Thomas et al.			
		5,428,606	6/27/95	Moskowitz			
		5,428,607	6/27/95	Hiller et al.			

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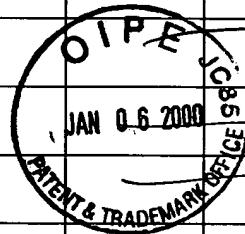
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U.S. PATENT DOCUMENTS

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<i>FB</i>	5,432,542	7/11/95	Thibadeau et al.			
	5,432,870	7/11/95	Schwartz			
	5,446,273	8/29/92	Leslie			
	5,450,122	9/12/95	Keene			
	5,450,490	9/12/95	Jensen et al.			
	5,461,426	10/24/95	Limberg et al.			
	5,469,506	11/21/95	Berson			
	5,473,631	12/5/95	Moses			
	5,479,168	12/26/95	Johnson et al.			
	5,481,294	1/2/96	Thomas et al.			
	5,488,664	1/30/96	Shamir			
	5,499,294	3/12/96	Friedman			
	5,515,081	5/7/96	Vasilik			
	5,524,936	6/11/96	Kunt et al.			
	5,530,759	1/25/96	Braudaway et al.			
	5,530,852	6/25/96	Meske, Jr. et al.			
	5,532,920	7/2/96	Hartrick et al.			
	5,537,223	7/16/96	Curry			
	5,539,471	7/23/96	Myhrvold et al.			



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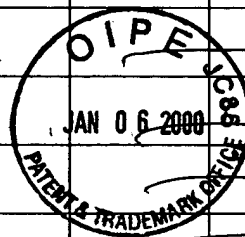
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U.S. PATENT DOCUMENTS

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<i>RD</i>	5,539,735	7/23/96	Moskowitz			
	5,541,662	7/30/96	Adams et al.			
	5,541,741	7/20/96	Suzuki			
	5,544,255	8/6/96	Smithies et al.			
	5,548,646	8/20/96	Aziz et al.			
	5,557,333	9/17/96	Jungo et al.			
	5,559,559	9/24/96	Jungo et al.			
	5,568,179	10/22/96	Diehl et al.			
	5,568,570	10/22/96	Rabbani			
	5,572,010	11/5/96	Petrie			
	5,572,247	11/5/96	Montgomery			
	5,576,532	11/19/96	Hecht			
	5,579,124	11/26/96	Aijala et al.			
	5,582,103	12/10/96	Tanaka et al.			
	5,587,743	6/11/96	Montgomery			
	5,590,197	12/31/96	Chen et al.			
	5,602,920	2/11/97	Bestler et al.			
	5,606,609	2/25/97	Houser et al.			
	5,611,575	3/18/97	Petrie			
<i>RD</i>	5,613,004	3/18/97	Cooperman et al.			



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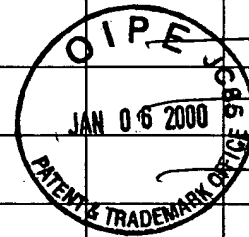
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U.S. PATENT DOCUMENTS

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<i>ELL</i>	5,613,012	3/18/97	Hoffman et al.			
	5,614,940	3/25/97	Cobbley et al.			
	5,617,148	4/1/97	Montgomery			
	5,629,770	5/13/97	Brassil			
	5,629,980	5/13/97	Stefik et al.			
	5,636,292	5/13/97	Rhoads			
	5,638,443	6/10/97	Stefik et al.			
	5,638,446	6/10/97	Rubin			
	5,646,997	7/8/97	Barton			
	5,647,017	7/8/97	Smithies et al.			
	5,659,726	8/19/97	Sandford II et al.			
	5,659,732	8/19/97	Kirsch			
	5,661,574	8/26/97	Kawana			
	5,664,018	9/2/97	Leighton			
	5,666,487	9/9/97	Goodman et al.			
<i>46</i>	5,721,788	2/24/98	Powell et al.			



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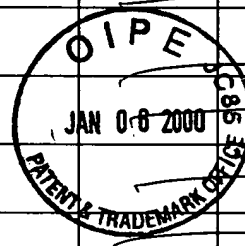
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FOREIGN PATENT DOCUMENTS

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	581 317	2/94	EPO	1	1	
	605 208 A2	7/94	EPO	1	1	
	629 972	12/94	EPO	1	1	
	649 074 A1	4/95	EPO	1	1	
	650 146 A1	4/95	EPO	1	1	
	705 025 A2	4/96	EPO	1	1	
	3,806,411	9/89	Germany	1	1	
	4-248771	9/92	Japan	1	1	
	05/242217	9/93	Japan	1	1	
	8-30759	2/96	Japan	1	1	
	2,063,018	5/81	U.K.	1	1	
	2,067,871	7/81	U.K.	1	1	
	2,196,167	4/88	U.K.	1	1	
	2,204,984	11/88	U.K.	1	1	
	WO89/08915	9/89	PCT	1	1	
	WO93/25038	12/93	PCT	1	1	
	WO95/10835	4/95	PCT	1	1	
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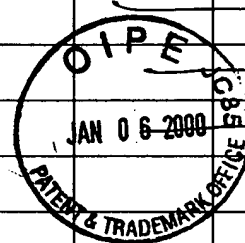
Applicant: Geoffrey B. Rhoads

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FOREIGN PATENT DOCUMENTS

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		WO95/20291	7/95	PCT			
		WO96/26494	8/96	PCT			
		WO96/27259	9/96	PCT			



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		Brassil et al., "Electronic Marking and Identification Techniques to Discourage Document Copying, <u>Proceedings of INFOCOM '94 Conference on Computer, IEEE Commun. Soc Conference</u> , June 12-16, 1994, pp. 1278-1287.
		Jain, "Image Coding Via a Nearest Neighbors Image Model," <u>IEEE Transactions on Communications</u> , Vol. COM-23, No. 3, March 1975, pp. 318-331.
		Arthur, "Digital Fingerprints Protect Artwork," <u>New Scientist</u> , November 12, 1994, p. 24.
		Matthews, "When Seeing is Not Believing," <u>New Scientist</u> , October 16, 1993, pp. 13-15.
		Bender et al., "Techniques for Data Hiding," Massachusetts Institute of Technology, Media Laboratory, January 1995, 10 pages.
		Walton, "Image Authentication for a Slippery New Age," <u>Dr. Dobb's Journal</u> , April 1995, pp. 18-26, 82-87.
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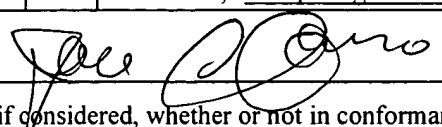
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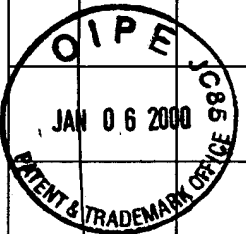
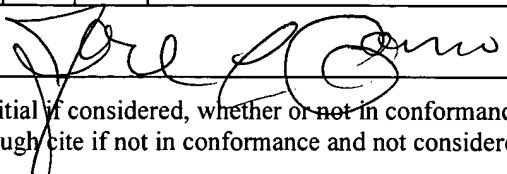
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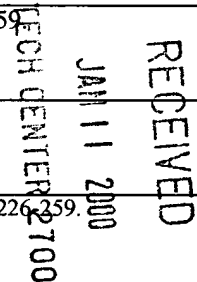
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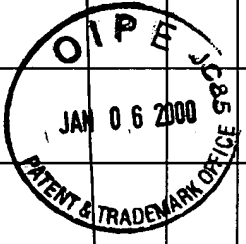
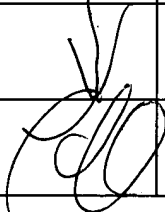
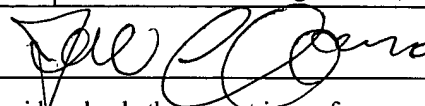
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